In the Claims:

1. (Currently Amended) Electromigration An electromigration test apparatus having:

a direct-current source:

an AC voltage source;

a circuit having at least one conductive structure to be tested, which is electrically coupled to the direct-current source and the AC voltage source; and

a measuring device, which is set up in such a way that <u>the</u> <u>measuring device</u> it detects an electrical parameter which is indicative of electromigration in the conductive structure to be tested;

the direct-current source being set up to expose the conductive structure to conditions which accelerate electromigration;

the AC voltage source being set up in such a way that the AC voltage source it exposes the conductive structure to be tested to an alternating current, independently of a direct current of the direct-current source and thus heats the conductive structure to be tested to a predetermined temperature that can be set.

- 2. (Currently Amended) <u>The apparatus</u> according to Claim 1, the electrical parameter being a resistance of the conductive structure to be tested.
- 3. (Currently Amended) The apparatus according to Claim 1 er-2, which furthermore has an evaluation unit for determining an electrical power, the evaluation unit having a voltage measuring device and a current measuring device which are implemented in the circuit in such a way that, by means thereof, a root-mean-square current through the conductive structure to be tested and a root-mean-square voltage across the conductive structure to be tested can be detected.
- 4. (Currently Amended) The apparatus Apparatus according to Claim 1 to 3, a control device being provided, which is set up in such a way

that the control device controls the AC voltage source in such a way that the temperature of the conductive structure to be tested can be kept constant.

- 5. (Currently Amended) <u>The apparatus</u> according to Claim 1, the conductive structure to be tested being arranged on or in a semiconductor wafer.
 - 6. (Currently Amended) <u>The apparatus</u> according to Claim 1 to 5, the alternating-current source and the direct-current source being integrated in a pulse generator.
- 7. (Currently Amended) <u>The apparatus</u> according to Claim 1 to 6, which furthermore has a heating furnace set up in such a way that it the heating furnace heats the conductive structure to be tested.
- 8. (Currently Amended) <u>A</u> Method for testing a conductive structure for electromigration, having the following steps:

electrically coupling a conductive structure to be tested to an electrical circuit electrically coupled to a direct-current source and an alternating-current source;

supplying ef-the conductive structure to be tested with a direct current which causes the electromigration within the conductive structure to be tested;

heating of the conductive structure to be tested_-by means of the alternating current to a predetermined temperature which can be set, the alternating current being independent of a direct current, which the direct current brings_bringing about the electromigration within the conductive structure to be tested; and

detection of detecting- an electrical parameter which is indicative of the electromigration within the conductive structure to be tested.

9. (Currently Amended) <u>The method</u> <u>Method</u> according to Claim 8, a resistance of the conductive structure to be tested being detected as the electrical parameter.

- 10. (Currently Amended) <u>The method</u> <u>Method</u>-according to Claim 8, in which, as further steps, a root-mean-square current in the conductive structure to be tested and a root-mean-square voltage across the conductive structure to be tested are detected and an electrical power is determined therefrom.
- 11. (Currently Amended) <u>The method Method</u>-according to Claim 8, the temperature of the conductive structure to be tested being regulated to a constant value by means of <u>the an</u> evaluation unit.
- 12. (Currently Amended) <u>The method</u> <u>Method</u> according to Claim 8 to 11, the conductive structure to be tested being formed on or in a semiconductor wafer.